

WHAT IS CLAIMED IS:

1. A rechargeable battery which includes a plurality of connected cells, comprising:

5 a first electrode which extracts electric power from the battery; and

a second electrode which is different from said first electrode and charges and discharges each of said plurality of cells.

2. The battery according to claim 1, further comprising a switch which electrically separates said plurality of cells forming the battery.

3. The battery according to claim 1, further comprising a switch which electrically separates said plurality of cells forming the battery when the battery is attached to a charger.

4. A charger for charging a battery which includes a plurality of connected cells, comprising:

a plurality of electrodes which electrically connect to said plurality of cells forming the battery;

20 a selector which selects a cell to be charged;

a charging and discharging section which supplies a charging/discharging current to a selected cell; and

a controller which controls said selector and charging and discharging section.

25 5. The charger according to claim 4, further comprising a switching section which, when the battery is attached, opens switches arranged in the battery to

electrically separate said plurality of cells forming the battery.

6. The charger according to claim 4, wherein after selecting a cell to be charged by controlling said
5 selector, said controller determines whether the selected cell has abnormality, and recovers said selected cell if the selected cell has abnormality.

7. The charger according to claim 6, wherein said
10 controller charges each cell not having the abnormality and each cell recovered from the abnormality, and stops the charging operation if a cell not recovered from the abnormality exists.

8. A charging method of a charger having a plurality of electrodes which charge and discharge cells forming
15 a rechargeable battery, a selector which selects a cell to be charged, and a charging and discharging section which supplies a charging/discharging current to a selected cell, and charging the rechargeable battery, comprising the steps of:

20 controlling the selector to select a cell to be charged from the cells forming the battery; and
controlling the charging and discharging section to charge the selected cell.

9. The method according to claim 8, further
25 comprising the step of, after charging of the selected cell is complete, controlling the selector to select a cell to be charged next.

10. The method according to claim 8, further comprising the steps of:

determining whether the selected cell has abnormality; and

5 if the selected cell has abnormality, controlling the charging and discharging section to recover the selected cell from the abnormality.

11. The method according to claim 10, further comprising the step of charging each cell not having
10 the abnormality and each cell recovered from the abnormality, and stopping the charging operation if a cell not recovered from the abnormality exists.